EnviroAtlas

enviroatlas.epa.gov/enviroatlas

Connecting ecosystems, people, and well-being

Woodbine, IA and surrounding area

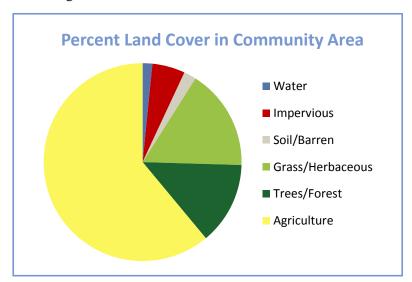
EnviroAtlas combines maps, graphs, and other analysis tools, fact sheets, and downloadable data into an easy-to-use, web-based educational and decision-support tool. EnviroAtlas helps users understand the connections between the benefits we derive from ecosystem services and the natural resources that provide them. For more information, please visit our website.

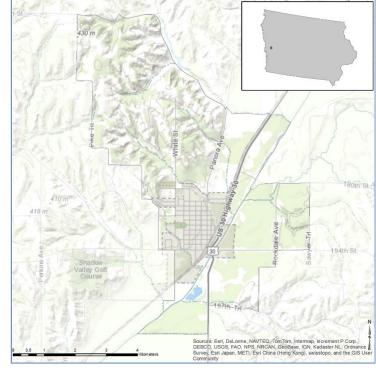
For selected U.S. communities, EnviroAtlas includes finescale maps and other information about existing and potential benefits from the local natural environment. This fact sheet highlights some of the many community data layers available.

Background

The Woodbine, IA area was chosen as an EnviroAtlas community because citizens there helped to shape EPA's Sustainable and Healthy Communities Research Program in its formative stage. EPA Region 7 staff identified Woodbine for one of six EPA "listening sessions" across the U.S. The EnviroAtlas boundary for the Woodbine area was determined using the Woodbine municipal boundary. It encompasses most of the Town of Woodbine as well as portions of unincorporated Harrison County. The area measures 22 square kilometers, and encompasses 1 census block group.

The Woodbine area is in the Western Corn Belt Plains ecoregion. It has severe, humid climate with hot summers





and cold winters. The region was historically vegetated with tall grass prairies; however, most of the region has been converted into agriculture. The leading industries are manufacturing and agriculture. Woodbine Manufacturing Company and Harrison County are among largest employers in the area. The demographics of the Woodbine community area indicate that the potential exists for income and other disparities in the distribution of environmental assets. EnviroAtlas can help screen for potential health and well-being disparities resulting from disproportionate distribution of "green infrastructure."

Woodbine Area Demographics	
Total population	1,555
Under 13 years old	16.78%
Over 70 years of age	17.94%
Other than white/non- Hispanic	1.74%
Below twice the poverty level	38.81%

Ecosystem Services Overview

In EnviroAtlas, ecosystem services are organized into seven benefit categories:

- Clean air
- Clean and plentiful water
- Natural hazard mitigation
- Climate stabilization
- Recreation, culture, and aesthetics
- Biodiversity conservation
- Food, fuel, and materials (data available only in select communities)

EnviroAtlas helps users understand the connections between the benefits we receive from ecosystem services and the natural resources that provide them. Examples of some of the environmental data included in EnviroAtlas are detailed below:

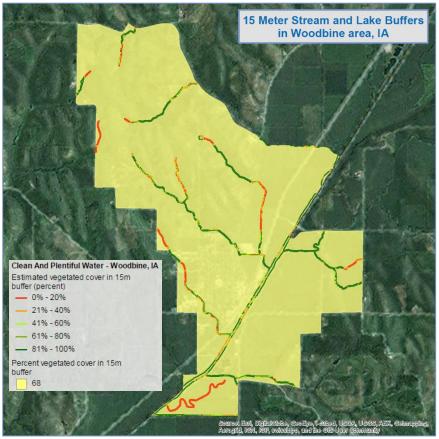
Green Space and Trees

Research indicates that physical and visual access to trees and other green space has positive physiological, cognitive, and emotional benefits. In the Interactive Map's table of contents, green space data layers can be found under all of the benefit categories.

- There are 12,952 square meters of green space per person.
- There are 22,963,578 tons of carbon stored in the local tree biomass with an additional 716,679 tons sequestered annually.
- 11,985 kilograms of ozone are removed from the air by local tree canopy every year.

Stream and Lake Buffers

Natural land cover adjacent to streams and rivers, sometimes called the riparian area or zone, helps protect water quality and supply for drinking, recreation, and aquatic habitat. The EnviroAtlas community component analyzes stream and lake buffers with widths of 15 and 50



The distribution of vegetated cover near streams and lakes

meters.

- An estimated 3.7% of Woodbine's land area is within 15 meters of a stream or lake.
- 67% of Woodbine's 15 meter stream and lake buffers are vegetated.

In the interactive map's table of contents, stream and lake buffer layers can be found in the Clean and Plentiful Water, Natural Hazard Mitigation, Recreation, Culture, and Aesthetics, and Biodiversity Conservation benefit categories.

EnviroAtlas Tools and Features

- <u>EnviroAtlas Community Component</u>: data layers based on 1-meter land cover summarized to the block group scale.
- EnviroAtlas National Component: data layers based on 30-meter land cover summarized to the watershed scale.
- EnviroAtlas Interactive Map: go directly to the interactive map.
- EnviroAtlas Fact Sheets: Describe the project, each community, and each data layer in detail.
- <u>Eco-Health Relationship Browser</u>: An interactive relational tool that explores ecosystems, the services they provide, and benefits to human health and well-being.
- Contact the EnviroAtlas Team: Please contact us if you have any questions about EnviroAtlas.

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